

ARMALITE, INC OWNER'S MANUAL FOR

ARMALITE AR-30 RIFLE



READ THIS MANUAL THOROUGHLY, PARTICULARLY THE WARNINGS, BEFORE USING THIS FIREARM! IT'S IMPORTANT!

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1. READ THIS FIRST!

Throughout this manual you will find WARNINGS and/or CAUTIONS printed in bold print. All WARNINGS and CAUTIONS should be read carefully and followed completely. WARNINGS discuss issues that could result in damage to your firearm, or injury or death to you or a bystander. CAUTIONS discuss issues that could result in damage or malfunction of your firearm.

A WARNING: IT IS YOUR RESPONSIBILITY TO ASSURE THAT YOUR FIREARM IS HANDLED, FIRED, AND STORED SAFELY AND RESPONSIBLY AT ALL TIMES.

This manual provides instructions on the operation and maintenance of your ArmaLite firearm. Read and understand it carefully before you try to use your firearm. Your safety, and that of those around you, depends on your knowledge of your firearm and on your knowledge of safety rules common to all firearms. Please study the common-sense safety rules noted in this manual. Your first responsibility as a gun owner is always safety!

Your second responsibility as a gun owner is security. Make sure that your firearm remains in responsible hands...YOURS! Don't become an unwitting partner in a crime or tragedy: make sure your firearm is properly secured. Lock it in a secure storage container or, if none is available, remove the bolt assembly and store it separately. IF YOU HAVE MORE THAN ONE AR-30, MAKE SURE YOU HAVE THE BOLTS IDENTIFIED TO THEIR SPECIFIC RIFLES! THE BOLTS ARE NOT INTERCHANGEABLE!

It is also your responsibility to assure that you comply with all federal, state, and local laws with regard to the purchase, ownership, use, and storage of your firearm.

NOTICE

ArmaLite has no control over the use of your firearm, and shall not be responsible for injury, death, or damage to property resulting from either intentional or accidental discharge of this firearm. In addition, ArmaLite shall not be responsible for proper function of the firearm when it is used for purposes or subjected to treatment for which it was not intended. ArmaLite will not honor claims which may result from careless or improper handling, unauthorized adjustments or parts replacement, corrosion, neglect, use of the wrong type or caliber of ammunition, or the use of ammunition other than original, high quality commercially manufactured ammunition in good condition or any combination thereof.

2. SAFETY FIRST! IT'S YOUR RESPONSIBILITY!

- * Treat every gun as if it is loaded ...AT ALL TIMES!
- * Always keep the muzzle pointed in a safe direction.
- * Never point your firearm at anything that you do not intend to shoot.
- * Keep your finger off the trigger and out of the trigger guard until you are aiming at your target and ready to shoot.
- * Always keep the safety in the "SAFE" position, especially when the firearm is loaded and cocked, until you are ready to fire.
- * Always keep and carry your firearm with an empty chamber until you intend to shoot, so that your firearm cannot be fired unintentionally. Firearms should be unloaded when not actually in use.
- * Be sure of your target and backstop before you shoot. As yourself what your bullet will hit if it misses or goes through the target.
- * Never shoot at hard, flat surfaces or water...bullets can ricochet.
- * Always wear hearing and eye protection when shooting.
- * Discharging firearms in poorly ventilated areas, cleaning firearms, or handling ammunition may result in exposure to lead, a substance known to be associated with birth defects, reproductive harm, and other serious injury. Have adequate ventilation at all times and wash hands after handling.
- * Be sure that your barrel is clear of obstructions, including excessive oil, grease, cleaning patches, etc before shooting.
- * Use only clean, high quality factory loaded ammunition in good condition. ArmaLite cannot condone the use of handloaded ammunition. Any such use voids the ArmaLite warranty.
- * Do not alter or modify your firearm.
- * Do not try to change your firearm's trigger pull because alterations of trigger pull can affect sear engagement and might cause accidental firing.
- * Store firearms and ammunition separately and beyond children's reach.
- * This firearm is EXTREMELY LOUD due to the large cartridge and the efficiency of the muzzle brake. Wear DOUBLE hearing protection: foam plugs and good quality hearing protection muffs. Assure that spectators and other shooters within 100 yards of the firing point are also wearing hearing protection. YOU are responsible for warning them that you are about to fire, and that the shot will be LOUD!
- * Avoid muzzle blast. The rifle's muzzle brake works by diverting muzzle gasses towards the rear. It is LOUD and can stir up debris from the ground! Both firers and spectators should wear eye and ear protection. Even wearing protection, spectators should not stand within 25 yards of the rifle and should be especially careful not to stand in the area 30 to 90 degrees to either side of the rifle. The best place to be is directly to the rear of the rifle, shooting it.
- * Never fire the rifle without the muzzle brake in place. The muzzle brake is an important safety device. It makes the rifle comfortable to shoot and aids accuracy. Firing the rifle without the muzzle brake in place will expose the shooter to very hard, unpleasant recoil. Assure that the muzzle brake is firmly secured and undamaged.
- * This rifle fires an extremely powerful cartridge. Make sure that your backstop is fully capable of stopping it.

* Make sure that no cleaning patch or other obstruction is in the barrel or muzzle brake. Firing the rifle with such an obstruction may damage the rifle or flying debris may cause injury.

IN CASE OF MALFUNCTION, STOP! REVIEW THIS MANUAL TO IDENTIFY AND RESOLVE THE PROBLEM. IF YOU CANNOT RESOLVE IT, CONTACT ARMALITE.

KEEP THIS MANUAL WITH YOUR RIFLE. IF YOU SELL THE RIFLE, GIVE THIS MANUAL TO THE NEW OWNER.

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4. SAFE STORAGE

WARNING: ALWAYS ASSURE THAT YOUR FIREARM IS COMPLETELY UNLOADED BEFORE STORING IT. ALWAYS TREAT YOUR FIREARM AS IF IT WERE LOADED. ALWAYS STORE YOUR FIREARM IN A SAFE LOCATION, SEPARATE FROM THE AMMUNITION.

Make certain that both the chamber and magazine of your rifle are unloaded before you store it. Store your rifle in a securely locked gun safe. If you do not have a safe, remove the bolt from your rifle and store it separately from the rifle in a secure location. Store your ammunition separately from the rifle and from the bolt.

5. GENERAL INFORMATION



Figure 1 The AR-30 Rifle

Description:

The AR-30 is a robust, front locked, manually operated bolt action rifle chambered for a variety of cartridges. It is intended for hunting or target shooting.

The AR-30 is a finely made rifle, a sophisticated machine built for many years of reliable use. It consists of two major elements, the Barreled Action Assembly and the Stock Group. They are joined at a unique machine-rest style V-block interface. Accurate, repeatable bedding is formed by the engagement of the octagonal Receiver and the deep V channel in the aluminum Forestock.

The AR-30 uses a "single stack" magazine so that the receiver needs only a narrow opening to admit it. This leaves the receiver extremely stout which is conducive to good accuracy.

The rifle bears a manganese phosphate finish on most steel surfaces, and hard anodizing on the aluminum surfaces.



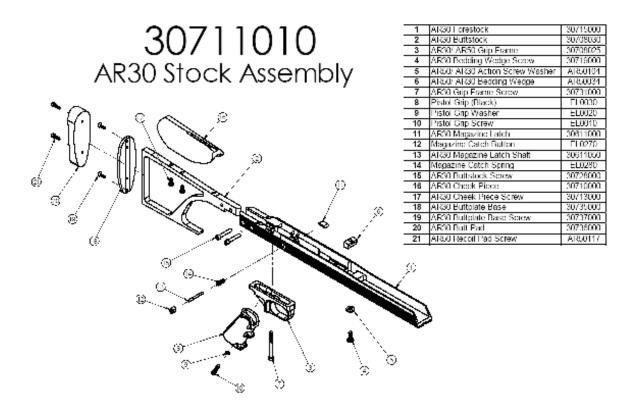
Figure 2
The ArmaLite AR-30 Muzzle Brake

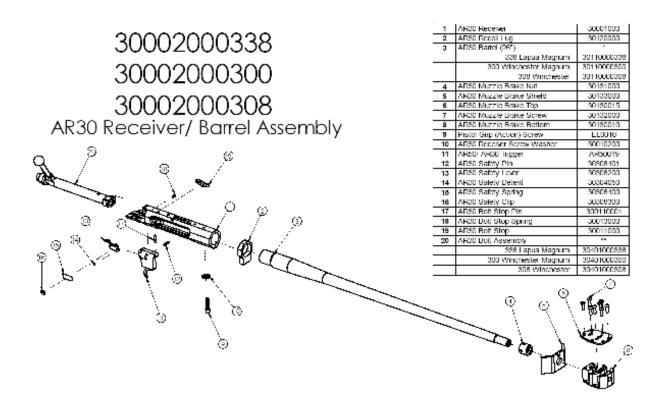
The AR-30 is equipped with an extremely effective Muzzle Brake. It reduces recoil to a relatively mild shove. It is effective enough that even a small-statured shooter can fire the rifle with the powerful .338 Lapua Magnum cartridge, and most shooters will be able to spend long days at the range without discomfort.

⚠ WARNING: THE MUZZLE BRAKE IS HELD IN PLACE BY BOTH A LOCK RING AND LOC-TITE. DON'T REMOVE IT UNLESS REPLACEMENT OR REPAIR IS NECESSARY. TRYING TO FORCE THE BRAKE OFF WITHOUT SOFTENING THE LOC-TITE MAY UNSCREW THE BARREL!

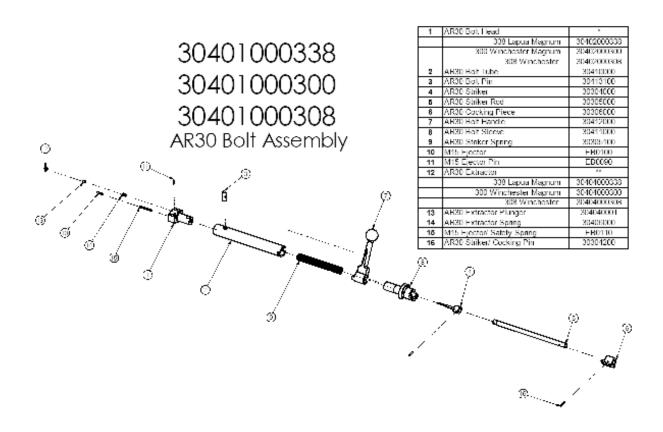
WARNING: YOUR ARMALITE FIREARM WAS DESIGNED TO FUNCTION PROPERLY WITH ITS ORIGINAL COMPONENTS. ALTERATIONS TO ITS ORIGINAL COMPONENTS OR REPLACEMENT OF THEM WITH AFTERMARKET COMPONENTS CAN CAUSE MALFUNCTIONS OR EVEN MAKE THE FIREARM UNSAFE. DO NOT ALTER ANY PART OR ADD / SUBSTITUTE PARTS NOT MANUFACTURED BY ARMALITE INC.

6. EXPLODED DRAWINGS AND PARTS LISTS





NOTE: Parts numbered 1 through 8, 11 through 16, and 20 on this page are factory replaceable only.



NOTE: Part number 1 on this page is factory replaceable only.

7. AMMUNITION

Nomenclature of cartridges can be confusing. It is vital that you understand cartridge nomenclature and only fire cartridges for which this firearm was designed.

WARNING: USE OF INCORRECT AMMUNITION CAN CAUSE WEAPON DAMAGE, PERSONAL INJURY, OR DEATH. MAKE ABSOLUTELY CERTAIN THAT YOU ARE USING CARTRIDGES DESIGNED FOR YOUR FIREARM. DO NOT FIRE OLD, CORRODED, DEFORMED, OR HANDLOADED AMMUNITION. IF YOU HAVE ANY QUESTIONS, CONTACT ARMALITE BEFORE FIRING.

ArmaLite chambers its AR-30 family of rifles for a number of different cartridges. In order to assure that you are using the correct cartridges for your rifle, you must look on the barrel. The caliber is marked on the left side of the barrel just in front of the receiver. If you have any questions regarding ammunition compatibility, CONTACT ARMALITE BEFORE FIRING THE RIFLE!!!!!!

WARNING: DO NOT FIRE SABOTED AMMUNITION FROM YOUR RIFLE. THE SABOT COULD STRIKE OR LODGE IN YOUR MUZZLE BRAKE CAUSING WEAPON DAMAGE AND POTENTIAL INJURY OR DEATH.

ACAUTION: TRACER AND ARMOR PIERCING AMMUNITION REDUCES BARREL LIFE.

Firing any of the ammunition in the above warnings will void your warranty.

8. INITIAL ASSEMBLY, INSPECTION, AND CLEANING

8.1 INITIAL ASSEMBLY

Your AR-30 Rifle is shipped to you completely assembled. The only additional assembly required by you is installation of the telescopic sight rail, bipod adapter (optional), and scope mount (optional).

A. Telescopic Sight Rail

This rail is specially made with special recoil lugs designed to defeat both lateral and longitudinal recoil forces and to engage the scope mounting holes on the receiver. The rail is designed to accept ArmaLite's scope mounts, as well as most other Weaver type rings.

The rail is supplied with four socket head cap screws for attachment to the receiver. One of the screws is shorter than the other three



Figure 3
The Scope Rail on the Receiver

CAUTION: THE SHORT SCREW GOES INTO THE FRONT HOLE IN THE RAIL.

To install the rail:

- 1. Remove the bolt group as described in the Disassembly Section of this manual.
- 2. Set the scope rail on the receiver, with the recoil lugs of the rail engaging the slots of the receiver
- 3. Insert a LONG screw in the rear hole and tighten it.
- 4. Repeat the process with the other screws, MAKING CERTAIN TO INSTALL THE SHORT SCREW INTO THE FRONT HOLE.
- 5. You may apply Loctite or any other thread cement to the screw threads if you wish. It is not necessary.



Figure 4
Attaching the ArmaLite Scope Mount

B. Attaching the ArmaLite Scope Mount or Rings: The Scope Mount will accept ArmaLite Mounts or Rings. They are equipped with a positioning cross-bar. Select a location on the scope rail, and attach the scope mount with the cross-rail engaging a slot in the rail. Tighten the mount until you feel a slight "stick" or "catch" in rotation of the mount knob. That catch is an elastomer ring locking the knob. The knobs need not be tightened harshly to work perfectly, and overenthusiastic tightening can damage the mount or knob.

WARNING: MAKE CERTAIN THAT THE SCOPE IS MOUNTED FAR ENOUGH FORWARD SO THAT IT WILL NOT IMPACT YOUR FACE DURING RECOIL. CHECK THE DISTANCE BETWEEN THE SCOPE AND YOUR FACE WHEN YOU ARE IN THE FIRING POSITION. WHEN IN DOUBT, INCREASE THE EYE RELIEF. BEAR IN MIND THAT YOUR EYE WILL BE CLOSER TO THE SCOPE WHEN SHOOTING FROM PRONE OR OFF THE BENCH THAN WHEN SHOOTING OFF-HAND.

C. Bipod Adapter

The AR-30 can be fired from a rest or bipod. An optional bipod adapter is available with which to mount Harris or other bipods. To install the bipod adapter:

1. Screw the sling swivel lug into the adapter, stopping when the hole in the lug is at right angles to the adapter.





Figures 5 and 6

Installing the Bipod

- 2. Insert the small rail of the adapter into the front of the accessory slot running along the bottom of the Forestock. Slide the adapter to the desired position. Tighten the nut using a 1/8 inch punch or similar tool until the hole is perpendicular to the barrel.
- 3. Follow the Harris instructions to attach the bipod to the adapter. Tightening the bipod will secure the adapter in place on the forestock. The bipod may be attached to the adapter when it is slid into the stock, as illustrated. When shooting, lean forward into the bipod slightly.

8.2 INITIAL INSPECTION

WARNING: READ THIS MANUAL COMPLETELY AS YOU INSPECT YOUR NEW ARMALITE FIREARM. MAKE CERTAIN THAT YOU UNDERSTAND HOW TO ASSEMBLE, OPERATE, DISASSEMBLE, MAINTAIN, AND STORE YOUR FIREARM SAFELY BEFORE YOU USE IT.

A. Controls and Indicators.

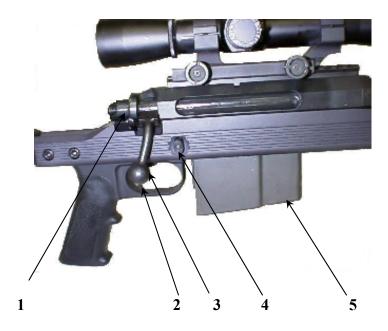


Figure 7
Operating Controls

- **1. Safety.** The Safety is mounted at the right rear of the receiver. To engage the safety, pull the safety to the rear "SAFE" position. To place the safety to "FIRE," push the safety to the forward position.
- **2. Trigger.** The trigger is located within the trigger guard. It is of conventional, single stage design. Grasp the grip with the right hand and pull the trigger straight to the rear.
- **3. Bolt Handle.** Lift the bolt handle to unlock the bolt and pull the bolt to the rear. Because the bolt handle is made short for easy handling when hunting, it will require considerable force to open it if the rifle is chambered for a magnum cartridge.
- **4. Magazine Catch Release Button**. Push this button in to release the magazine from the receiver and stock group.
- **5. Magazine.** The magazine is inserted into the opening in the bottom side of the stock. The magazine should be securely locked into the receiver/stock group by the magazine catch.

B. Maintenance and Safety Checks

- 1. Make sure that the rifle is unloaded, and that the bolt is to the rear.
- 2. Inspect the bore to make sure that there are no obstructions.

- 3. Inspect the muzzle brake to assure that it is tight, all screws are intact, and the muzzle brake shield is in place.
- 4. Make sure the bolts holding the receiver to the stock are tight.

8.3 INITIAL CLEANING

WARNING: TO ASSURE ITS PROTECTION FROM CORROSION, YOUR ARMALITE FIREARM HAS BEEN SHIPPED WITH PRESERVATIVE OIL IN THE BORE. FIRING THE WEAPON WITH PRESERVATIVE IN THE BORE CAN INCREASE PRESSURES, WITH POSSIBLE WEAPON DAMAGE OR PERSONAL INJURY OR DEATH. CLEAN AND DRY THE BORE BEFORE FIRING YOUR ARMALITE FIREARM.

9. LOADING AND FIRING

WARNING: ALWAYS KEEP THE SAFETY IN THE "SAFE" POSITION UNTIL YOU ARE READY TO FIRE THE WEAPON. REMEMBER THAT THE SAFETY IS SIMPLY A MECHANICAL DEVICE, AND AS SUCH, COULD POSSIBLY FAIL. NEVER DEPEND ON ANY SAFETY TO JUSTIFY UNSAFE GUN HANDLING. ALWAYS KEEP THE CHAMBER EMPTY AND THE WEAPON POINTED IN A SAFE DIRECTION EVEN WHEN THE SAFETY IS ON.

- 1. **Verify range safety.** Make sure that the rifle is pointed in a safe direction, towards a known, adequate backstop. Make sure that everybody within 100 yards knows that the rifle is about to be fired and protects their hearing.
- 2. Put the safety in the "SAFE" position.
- 3. If it's not already open, raise the bolt handle and pull the bolt to the rear.

CAUTION: DO NOT USE EXCESSIVE FORCE TO PULL THE BOLT TO THE REAR. THE BOLT DOES NOT NEED TO BE SLAMMED REARWARD. THE CARTRIDGE CASE WILL EXTRACT AND EJECT RELIABLY WITHOUT SUCH FORCE. PULLING THE BOLT REARWARD WITH EXCESSIVE FORCE CAN DEFORM OR BREAK THE BOLT STOP.

- 4. Place a magazine into the receiver through the magazine well with an upward motion until the magazine is locked in position.
- 5. Close the bolt to strip a cartridge off the magazine, chamber and lock the cartridge. Push the bolt forward so that the extractor snaps over the case rim. You will feel some resistance as the extractor is displaced over the rim of the cartridge. Turn the bolt handle down completely.
- 6. Assume a good position behind the rifle. Make sure that the butt-pad is in complete contact with your shoulder. Make sure that your cheek is well forward on the cheek rest.
- 7. Aim at the target and push the safety forward to the "FIRE" position
- 8. Pull the trigger straight to the rear. You will know when the rifle fires!!!!

Note: the AR-30 is equipped with a very secure manual safety. However, ArmaLite recommends only loading the rifle immediately before firing a shot instead of leaving the rifle loaded and on safe. As a practical target shooting measure, the rifle should be considered safe only when it is unloaded and the action is open.

⚠ WARNING: IF THE RIFLE FAILS TO FIRE WHEN THE TRIGGER IS PULLED:

- 1. KEEP THE RIFLE POINT AT THE TARGET! WAIT 15 SECONDS TO ALLOW A POSSIBLE "HANGFIRE" TO GO OFF THEN...
- 2. CHECK TO SEE IF THE SAFETY IS ENGAGED BY MISTAKE. IF SO, PUSH THE SAFETY FORWARD TO THE "FIRE" POSITION, AND FIRE.
- 3. IF THE RIFLE STILL DOESN'T FIRE, BE CAUTIOUS AND ASSUME THE CARTRIDGE WILL DISCHARGE WHEN THE BOLT IS OPENED AND MOVE FROM BEHIND THE ACTION. WAIT ANOTHER 15 SECONDS TO ALLOW A POSSIBLE HANGFIRE TO DISCHARGE, AND OPEN THE BOLT SMARTLY AND UNLOAD THE RIFLE.
- 4. EXAMINE THE RIFLE CAREFULLY TO IDENTIFY THE CAUSE OF THE MALFUNCTION, AND CORRECT IT.

WARNING: INJURY, DEATH, OR FIREARM DAMAGE CAN RESULT FROM FIRING A WEAPON WITH AN OBSTRUCTION IN THE BORE. BEFORE YOU FIRE, MAKE SURE THAT THE BORE IS NOT OBSTRUCTED. NEVER ATTEMPT TO SHOOT OUT A BORE OBSTRUCTION.

⚠ WARNING: ALWAYS WEAR EYE AND EAR PROTECTION. MAKE SURE THAT NEARBY BYSTANDERS ALSO WEAR EYE AND EAR PROTECTION.

MARNING: HANDLING OF CARTRIDGES AND FIRING WEAPONS MAY EXPOSE YOU TO LEAD. ALWAYS ASSURE THAT THERE IS ADEQUATE VENTILATION. ALWAYS WASH YOUR HANDS AFTER HANDLING AMMUNITION OR FIRING YOUR WEAPON.

WARNING: RAPID FIRING OF THE WEAPON MAY CAUSE SOME COMPONENTS TO BECOME HOT ENOUGH TO CAUSE INJURY. EXTENDED SESSIONS OF VERY RAPID FIRING MAY CAUSE A CARTRIDGE LEFT IN THE CHAMBER TO "COOKOFF", FIRING ITSELF WITHOUT YOU PULLING THE TRIGGER. ALWAYS UNLOAD THE WEAPON IMMEDIATELY AFTER YOU FINISH FIRING.

WARNING: THIS WEAPON WILL FIRE WITHOUT A MAGAZINE IN IT. ALWAYS ASSURE THAT THE CHAMBER IS EMPTY. THE WEAPON SHOULD NOT BE CONSIDERED TO BE SAFE UNLESS THE

MAGAZINE IS REMOVED, THE SAFETY IS ON, AND THE BOLT IS OPEN, AND THE CHAMBER IS EMPTY.

WARNING: THE FIRED CARTRIDGE CASE IS HOT WHEN IT IS EJECTED FROM THE FIREARM. DO NOT ALLOW IT TO BURN YOU, OR TO DISTRACT YOU FROM SAFE HANDLING OF THE FIREARM.

10. CLEARING / UNLOADING THE FIREARM

ANYTIME YOU HANDLE A FIREARM, YOU SHOULD IMMEDIATELY INSPECT IT TO ASSURE THAT IT IS COMPLETELY UNLOADED.

MARNING: IF YOU KNOW NOTHING ELSE ABOUT YOUR ARMALITE FIREARM, YOU MUST KNOW HOW TO UNLOAD IT AND CLEAR IT TO MAKE IT SAFE.

1. Place the safety lever on "SAFE".

NOTE: If the firearm is not cocked, the lever cannot be set on "SAFE".

2. Remove the magazine by pressing the magazine catch and pulling the magazine down and out of the receiver.

CAUTION: THE MAGAZINE WILL FALL FREE WHEN THE MAGAZINE CATCH IS PRESSED. DON'T ALLOW THE MAGAZINE TO FALL ONTO A HARD SURFACE. DOING SO MAY DAMAGE THE MAGAZINE.

- 3. Extract the cartridge (if any) from the chamber. To extract a cartridge pull the bolt fully to the rear. If there is a cartridge in the chamber, it should be extracted and ejected from the firearm.
- 4. Look into the chamber to assure that it does not contain a cartridge.

⚠ WARNING: NEVER ASSUME THAT THE CHAMBER IS EMPTY UNTIL YOU HAVE VISUALLY EXAMINED IT AND SEE THAT IT IS EMPTY.

WARNING: THE STEPS IN UNLOADING YOUR FIREARM MUST BE FOLLOWED IN THE EXACT ORDER GIVEN. THE MAGAZINE MUST BE REMOVED BEFORE THE CHAMBER IS INSPECTED. IF YOU CLEAR THE CHAMBER BEFORE REMOVING THE MAGAZINE, YOU MIGHT ACCIDENTLY REMOVE ONE CARTRIDGE FROM THE CHAMBER AND THEN, UPON CLOSING THE BOLT, CHAMBER ANOTHER CARTRIDGE FROM THE MAGAZINE. THE FIREARM WILL STILL BE LOADED. REMEMBER THAT A CARTRIDGE IN THE

CHAMBER CAN STILL BE FIRED EVEN AFTER THE MAGAZINE IS REMOVED.

WARNING: ALWAYS ASSUME ALL FIREARMS ARE LOADED. ANYTIME YOU HANDLE A FIREARM, YOU SHOULD IMMEDIATELY INSPECT IT TO ASSURE THAT IT IS COMPLETELY UNLOADED.

11. ZEROING THE SIGHTS

Your ArmaLite AR-30 is designed to employ a telescopic sight. To install and zero the scope on your AR-30, follow the instructions in your scope owner's manual.

12. DISASSEMBLY

MARNING: ALWAYS UNLOAD YOUR FIREARM BEFORE CLEANING, LUBRICATION, DISASSEMBLY, OR REASSEMBLY.

1. Assure that the rifle is unloaded, and engage the safety.



2. Remove the bolt group. Unlock the bolt and pull the bolt to the rear of the receiver. Depress the bolt catch (6) at the left rear of the receiver and pull the bolt group to the rear and out of the receiver. Further disassembly of the bolt group should be done only for repair or lubrication by a qualified service technician or gunsmith.

CAUTION: NO FURTHER DISASSEMBLY IS NEEDED FOR ROUTINE CLEANING AND MAINTENANCE.

3. Removing the Receiver Assembly.

CAUTION: REMOVE THE TELESCOPIC SIGHT FROM THE RECEIVER TO PREVENT DAMAGE DURING HANDLING.

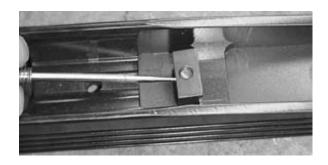


Figure 10 Loosening the Bedding Wedge

Loosen the Bedding Wedge at the front of the receiver by loosening the bedding wedge screw under the action using a 3/16 inch Allen wrench. Do not completely remove the screw. Tap the head of the screw lightly with a plastic hammer. This will loosen the bedding wedge so that the receiver can be removed.



Figure 11 Removing the Grip Frame

Place the rifle upside down. Remove the grip frame by removing the grip frame screw, using a 3/16 inch Allen wrench. Pull the grip frame from the forestock.

Remove the action screw from the bottom of the forestock using a 3/16 inch Allen wrench. Lift the stock assembly straight off the receiver.



Figure 12 Removing the Buttstock

4. Removing the Buttstock from the Forestock. Remove the two buttstock screws at the right rear of the forestock using a 3/16 inch Allen wrench. Pull the buttstock down and to the rear to remove it

WARNING: DO NOT REMOVE THE TRIGGER GROUP OR MUZZLE BRAKE. THE TRIGGER GROUP IS NOT USER-SERVICEABLE AND A REASSEMBLY ERROR COULD INTERFERE WITH CORRECT RIFLE FUNCTION. THE MUZZLE BRAKE IS HELD IN PLACE BY ITS LOCK RING AND LOCTITE.

13. MAINTENANCE

WARNING: ALWAYS UNLOAD YOUR FIREARM BEFORE CLEANING, LUBRICATION, DISASSEMBLY, OR REASSEMBLY.

A. Cleaning. Improper cleaning ruins more firearms than extensive shooting does. The AR-30 will provide years of use with minimal cleaning and preservation.

Remove the bolt. Wipe the rifle and bolt free of dust with a dry rag. Further clean the surface with a rag bearing a small amount of solvent. Pay particular care to the interior of the receiver.

Note: The phosphated finish of a new bolt and receiver will make the movement of a new action seem rough. Movement of the bolt will become very slick as these parts break in and are properly lubricated.

Use a pull-through device or a high quality cleaning rod to clean the bore. Use a proper caliber bore brush soaked with a good bore solvent. Pass it from the breech to the muzzle several times.

Pass a closely fitting patch soaked with solvent through the bore from the breech to the muzzle. Follow the solvent maker's instructions regarding soaking or waiting times. *Make sure that the patch is small enough to avoid being caught in the Muzzle Brake*. Pass dry patches through the bore in a similar manner to remove the solvent and dirt from the bore. Preserve the bore with a generous oiling. Apply the oil by passing an oily patch trough the bore from breech to front.

Oil or lightly grease the narrow track in the receiver behind the bolt. The sear surface of the cocking piece runs through this track and serves as a rear bolt guide. A "Q-Tip" or other such device will suffice.

Heat treat processes may produce dark areas of phosphate at the breech ring and bolt cam of the receiver. This is normal.

B. Preservation. Wipe the entire rifle with a slightly oily rag. Make sure that the bore is well oiled. Store in a container that contains no foam. (Foam absorbs moist air. Heating the container may drive moisture from the foam. It can then condense on a cool rifle.) Use a desiccant or Vapor Phase Inhibitor in the container to help prevent rust.

WARNING: DO NOT APPLY LUBRICANT OR PRESERVATIVE TO YOUR AMMUNITION. DOING SO MAY CAUSE THE CARTRIDGE TO PARTIALLY MALFUNCTION, LEAVING THE BULLET LODGED IN THE BORE, CREATING A BORE OBSTRUCTION.

14. REASSEMBLY

WARNING: ALWAYS UNLOAD YOUR FIREARM BEFORE CLEANING, LUBRICATION, DISASSEMBLY, OR REASSEMBLY.

Reverse the Disassembly steps above. Tighten the action screws <u>very LIGHTLY</u>. Then tighten the bedding wedge screw on the bedding wedge at the front of the receiver. Finish by tightening the two action screws. This assures that the Recoil Lug is seated properly.

Final torques are not particularly critical on the AR-30. However, for those of you who desire to duplicate factory specifications, the following torque values are recommended:

Bedding Wedge Screw	12.5 – 15 ft-lbs
Grip Frame Screw	7.5 - 10 ft-lbs
Buttstock to Forestock Screw-	7.5 - 10 ft-lbs
Action Screw	15 – 17.5 ft-lbs

15. TROUBLESHOOTING

PROBLEM	CHECK FOR	WHAT TO DO
WON'T FIRE	Selector lever on SAFE	Put it on FIRE
	Defective ammunition.	Remove and discard
BOLT WON'T LOCK	Dirty bolt	Clean
	Burred or broken bolt	Contact ArmaLite
	Dirt, corrosion, or carbon buildup in locking lugs	Clean lugs
WON'T EXTRACT	Broken extractor spring	Replace
	Dirty, corroded, or reloaded ammunition.	Remove and discard.
	Carbon in chamber	Clean chamber
	Frozen or worn extractor	Remove and clean or replace
WON'T CHAMBER	Dirty corroded of defective ammunition	Remove and discard

16. WARRANTY, SERVICE, AND SUGGESTIONS

Specific warranty provisions for your ArmaLite firearm are shown on the warranty card shipped with your new firearm. Be sure to complete your warranty card and return it to ArmaLite immediately. The warranty will only be honored upon completion of the warranty form and its return to ArmaLite within 30 days of the original customer's purchase date along with a copy of the dated sales receipt.

You must have a Return Material Authorization (RMA) number from our service department in order to return a firearm for service. We will not accept a firearm without an RMA. Contact us as shown below. After you have your RMA number, assure that your firearm is completely unloaded. Then package your firearm securely and ship it to the below address. Include a letter explaining, in as much detail as possible, the nature of the problem or service needed.

WARNING: MAKE ABSOLUTELY CERTAIN THAT THE RIFLE IS UNLOADED!!! NEVER SHIP LIVE AMMUNITION WITH ANY FIREARM THAT YOU ARE RETURNING TO ARMALITE FOR SERVICE.

WARNING: IT IS THE OWNER'S RESPONSIBILITY TO ASSURE THAT ANY PARTS THAT ARE PURCHASED FROM ARMALITE ARE CORRECTLY FITTED AND INSTALLED. IMPROPER FITTING OR INSTALLATION MAY RESULT IN INJURY, DEATH, OR DAMAGE/MALFUNCTION OF THE FIREARM.

A copy of the owner's manual for any ArmaLite firearm is available free in the Library on ArmaLite's website or may be obtained free in hard copy by contacting ArmaLite.

Additional technical information can be found in Technical Notes in the Library section of ArmaLite's website.

To answer any questions you may have about the firearm, or to offer suggestions for improvements, please contact us at:

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